

SR B650

Ultra Low Noise Voltage Controlled 1000 MHz SAW Oscillator
Tentative specification

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Mechanical characteristics

Package:

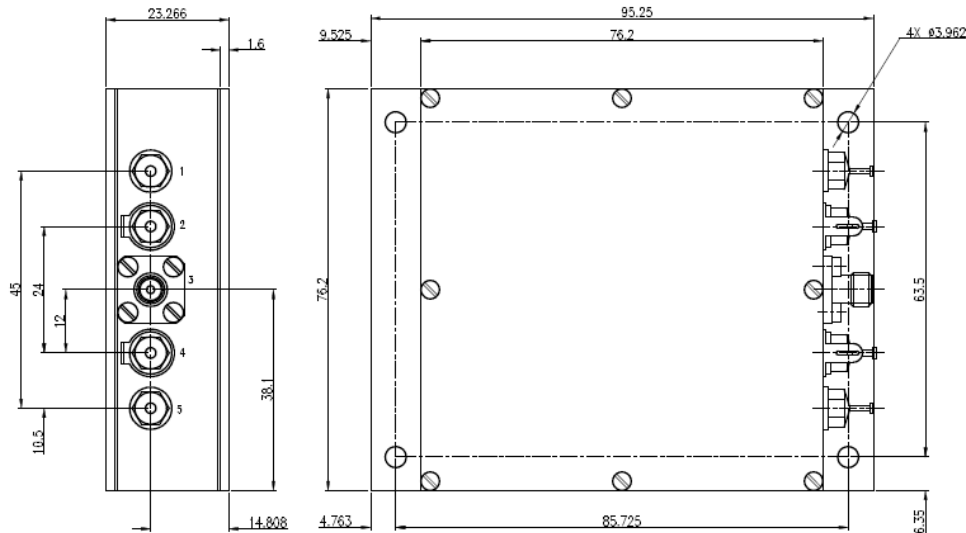
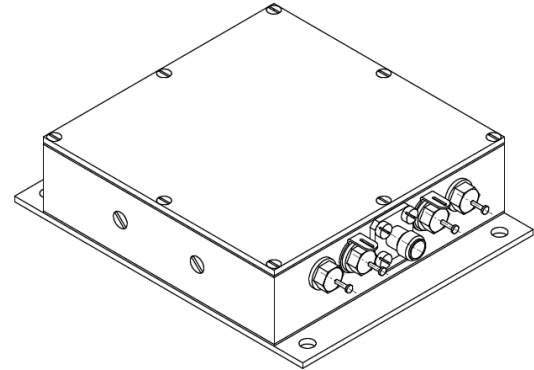
- Machined, shielded enclosure
- SMA connector & feedthru solder pins

Foot-print:

- 96 x 77 mm max.
- [3.75 x 3 inch]

Height:

- 23.3 mm max.
- [0.916 inch]



Pin description

Pin number	Type	Label	Function
1	Feedthru	NA	NC
2	Feedthru + Ground	DC Supply voltage	Oscillator & oven power supply
3	Female SMA	Frequency output	Frequency output
4	Feedthru + Ground	Voltage control	Voltage control for electrical tuning
5	Feedthru	NA	NC

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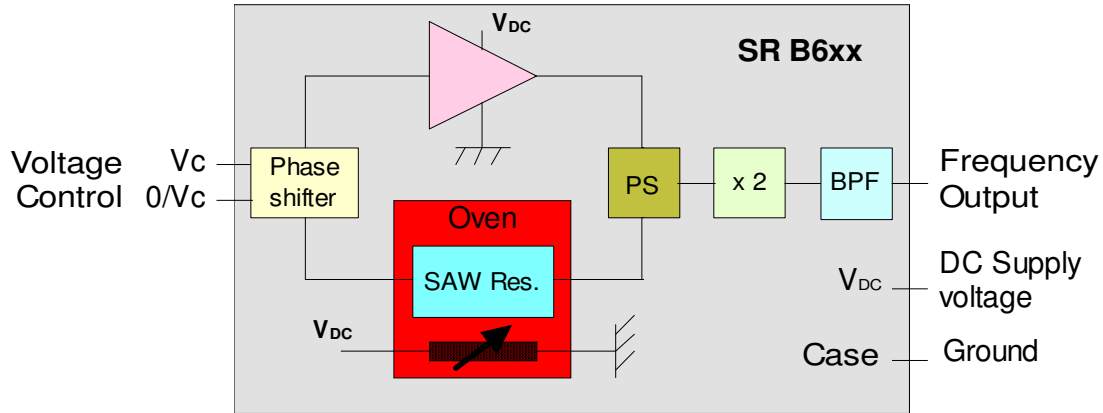
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Technical Characteristics

Block diagram



Electrical specifications

Electrical Parameters	Unit	Minimum	Typical	Maximum
Frequency output (SMA Connector)				
Nominal frequency	MHz		1000	
Output level (50 Ω load)	dBm	5	6	7
Harmonics suppression	dBc	- 30		
Phase noise @ 1 kHz offset	dBc/Hz		- 132	- 126
Phase noise @ 10 kHz offset	dBc/Hz		- 158	- 155
Phase noise @ 100 kHz offset	dBc/Hz		- 165	- 163
Phase noise floor	dBc/Hz		< - 168	- 165
VSWR	-			2:1
Free running mode (Voltage Control pin NC)				
Factory set accuracy @ 25 °C	ppm		± 0.1	± 0.5
Temperature stability	ppm			± 2
Aging per year	ppm			± 1
Electrical tuning (Voltage Control pin)				
Relative tuning range	ppm			± 4
Voltage range	V _{DC}	3		7
Slope @ V control = 4.7 V	Hz / V	2000	3000	4400
Supply voltage pin				
Voltage range	V _{DC}	11.8	12	12.2
Supply current	mA		250 @ +25°C	700
Warm up time	mn		4	5